3rd Year Surgery Clerkship
Student Handbook

Drexel University College of Medicine
Department of Surgery
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WELCOME

This handbook contains information for the major clinical clerkship in surgery:

- Goals and Objectives
- Performance Expectation
- Grading Information

Please keep in mind that the goal of the clerkship is to provide exposure and a basic knowledge base to the broad waterfront of “Surgery.” The goal of the clerkship is neither to provide extensive practical experience in surgery that the student becomes an expert in any area. Such in-depth experiences are available in the fourth year when they are of maximum benefit to students who wish a focused experience in a narrow, specialty area of surgery.

For questions and concerns at any time during the clerkship, please contact:

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Sites and Personnel
GOALS AND OBJECTIVES

Surgery Clerkship: Goals and Objectives (ACGME Competencies)

The format for this listing of goals and objectives for the Surgery Clerkship is modeled after the ACGME Core Competencies (Patient Care, Medical Knowledge, Interpersonal and Communication Skills, Professionalism, Practice-Based Learning and Improvement, and Systems-Based Practice).

The goals listed for each competency mirror the goals stated in the Graduation Competencies (i.e., exit objectives).

The instructional strategies for the following objectives include: supervised clinical experiences, bedside teaching rounds, lectures, textbooks and Operating Room experiences. Clinical skills and medical knowledge are assessed through direct clinical observation, student completion of the clinical passport, and faculty/resident completion of DUCOM evaluation forms. Medical knowledge is also assessed through the NBME subject (SHELF) examination and oral examinations.

I. Competency: Patient Care

Goal: Students must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health in all patients across the continuum of age.

Objectives:

During this rotation, students are expected to:

1. Gather essential and accurate information about their patients.
   - Learn surgical assessment skills.
   - Demonstrate sensitivity in the care of all patients by recognizing each of them as an individual, with the appropriate consideration of diversity in age, culture, disability, educational background, ethnicity, gender, gender identity, race, religion, sexual orientation, and socioeconomic background.
   - Effectively communicate with patients and families in pre-op, post-op and outpatient settings.
   - Learn indications for surgery: medical care, timing of surgery, risk management.
   - Work collaboratively with all members of the healthcare team.
   - Recognize the limitations of level of training and seek help appropriately.
   - Protect patients from harm.
   - Advocate for patient interests.
2. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up to date scientific evidence, and clinical judgment.

- Interpret history and physical exam findings.
- Interpret labs (hematological), non-invasive vascular lab, radiologic tests, as appropriate for surgery.
- Create a sufficiently broad initial differential diagnosis for each problem.
- Outline an initial evaluation and choose appropriate lab tests.
- Interpret the results of the tests.
- Describe the most common treatments for the final diagnosis.

3. Counsel and educate patients and their families

- Effectively communicate information about the diagnosis and treatment to the patient and family.
- Recognize the important role of patient education in treatment of acute and chronic illness, and prevention of disease.
- Learn indications for surgery: medical care, timing of surgery, risk management.

4. Use information technology to support patient care decisions and patient education.

5. Provide health care services aimed at preventing health problems or maintaining health.

6. Work with other health care professionals, including those from other disciplines, to provide patient-focused care.

II. Competency: Medical Knowledge

**Goal:** Students must demonstrate knowledge about established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

**Objectives:**

During this rotation, students are expected to:

1. Demonstrate basic knowledge of structure and function of major organ systems in the context of health and disease.
2. Identify and learn the core principles of Surgery.

3. Develop a broad based knowledge of surgery that is applicable to many areas of medicine.

4. Identify social, economic, psychological, and cultural factors that contribute to health and disease.

5. Demonstrate a basic knowledge of the following areas:
   - Nutritional assessment and treatment
   - Risk assessment (geriatric competencies):
     Issues of safety and prevention
     Risks, indications, alternatives and contraindications for indwelling (Foley) catheter use
     Risk for developing pressure ulcers
     Risk of falling
     Risk of aspiration

6. Demonstrate analytic thinking and clinical reasoning to interpret data and develop a differential diagnosis.

7. Perform common technical procedures accurately and safely.

III. Competency: Interpersonal and Communication Skills

Goal: Students must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates.

Objectives:

During this rotation, students are expected to:

1. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families in pre-op, post-op and outpatient settings.

2. Use communication techniques that enable development of a therapeutic alliance with the patient and family, being sensitive to the unique social condition and cultural background of the family.

3. Communicate with patients and families regarding advanced care directives and end of life care.
4. Communicate effectively in difficult situations including distressed patients and their family members.

5. Synthesize material and present cases in an understandable and concise manner.

6. Learn surgical assessment skills and formulate plan for patients.

7. Communicate effectively with physicians, other health care professionals, and health-related agencies.

8. Document medical information accurately and timely in the medical record.

IV. Competency: Professionalism

Goal: Students must demonstrate adherence to ethical principles, development of physician attributes, and a commitment to carrying out professional responsibilities.

Objectives:

During this rotation, students are expected to:

1. Demonstrate respect for patient and family attitudes, behaviors and lifestyles, with particular attention to cultural, ethnic, and socioeconomic influences.

2. Demonstrate honesty, integrity, reliability and responsibility in all interactions with patients, families, colleagues, and other professional contacts.

3. Demonstrate behaviors and attitudes that promote the best interest of patients and families and that supersede self-interest.

4. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, and informed consent.

5. Demonstrate a positive attitude and regard for education by demonstrating intellectual curiosity, initiative, academic integrity, and willing acceptance of feedback.


7. Demonstrate a professional image in behavior and dress.
V. Competency: Practice-Based Learning and Improvement

Goal: Students must be able to investigate and evaluate their approach to patient care, appraise and assimilate scientific evidence, and continuously improve patient care based on self-evaluation and life-long learning.

Objectives:
During this rotation, students are expected to:

1. Identify strengths and weaknesses in knowledge and skills based on critical reflection and self-evaluation.
2. Seek out opportunities and self-directed learning activities to strengthen deficits.
3. Demonstrate maturity in soliciting, accepting, and acting on feedback in an effort to effectively make improvements.
4. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.
5. Use information technology to access online medical information, support patient care decisions, enhance their own education, and facilitate the learning of colleagues and other health care professionals.

VI. Competency: Systems-Based Practice

Goal: Students must demonstrate an awareness of, and responsiveness to, the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Objectives:
During this rotation, students are expected to:

1. Work collaboratively in inter-professional teams to enhance the quality of patient care.
2. Identify available community resources beneficial in caring for patients.
3. Describe how the patient's insurance coverage or lack thereof is an impediment or aid to the patient's care.
Subspecialty Rotation Goals and Objectives

Anesthesiology

- Expose students to the pre-op evaluation, intra-op management and PACU care of patients from the anesthesia perspective.
- Familiarize students with general, regional and local techniques of anesthesia.
- Have students participate in the provision of anesthesia in a supervised setting.

Neurosurgery

- Expose students to the office, acute care hospital and Operating Room essentials of Neurosurgery.
- Familiarize students with the diagnosis and treatment of CNS and spine disease to include the interpretation of CT scans and MRI's.
- Provide clinical opportunities for students to perform a neurologic exam from the standpoint of Neurosurgery.

Ophthalmology

- Expose students to office and Operating Room essentials of ophthalmology.
- Have students participate in the recognition and diagnosis of ocular disease.
- Provide clinical opportunities to perform a complete ocular exam.

Orthopaedic Surgery

- Expose students to all venues of orthopaedic practice: outpatient, emergency department and floor/Operating Room.
- Have students participate in the Operating Room on occasions where they will gain familiarity with the basic orthopaedic genres of cases: joint replacement, fracture, spine surgery, and arthroscopy.
- Provide a “skills station” where students will be instructed in splinting, bracing and casting.

Otolaryngology

- Expose students to office and Operating Room essentials of ear, nose and throat.
- Have students participate in the recognition and diagnosis of ENT disease.
- Provide clinical opportunities to perform a complete ear and nose exam as well as direct/indirect laryngoscopy.
Plastic Surgery

- Expose students to office, acute care hospital and Operating Room essentials of Plastic Surgery.
- Familiarize students with cosmetic and reconstructive aspects of Plastic Surgery.
- Provide clinical opportunities to perform suturing and dressing care of Plastic Surgery patients (to include the VAC device).

Urology

- Expose students to the office, acute care hospital and Operating Room essentials of urology.
- Familiarize students with the diagnosis and treatment of urologic diseases to include the kidneys, bladder, and prostate, both benign and malignant.
- Provide clinical opportunities for students to perform rectal exams, and assist with transrectal cystoscopy and open surgery.

- NOTE: Check your site as to availability of these subspecialty

Specific Performance Expectations

1. Attend all conferences and assigned clinics.
2. Be an active member of the surgical team.
3. Follow the advice and instruction of the attendings/residents.
4. Pick up and follow at least three (3) patients per rotation.
5. Know the complete course of your patients.
6. Learn to present patients orally, in a concise and complete manner.
7. Make sure that lectures and ward rounds take priority over clinical activities.
8. Dress appropriately (i.e. professional attire).
9. Strive to be present in the operating room as much as possible.
10. Have fun!
## CLINICAL EXPERIENCE

### CLINICAL EXPERIENCE REQUIREMENTS

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<th>Real Patients</th>
<th>Virtual Patients (Video, etc.)</th>
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<tr>
<td>Peripheral vascular dz.</td>
<td>1</td>
<td>√</td>
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<tr>
<td>Pilonidal cyst</td>
<td>1</td>
<td>√</td>
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<td>√</td>
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<tr>
<td>Prostate cancer</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
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<td></td>
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<tr>
<td>Pulmonary embolism</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
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<tr>
<td>Pyloric stenosis</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
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<tr>
<td>Rectal cancer</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
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<tr>
<td>Renal cell carcinoma</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
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</tr>
<tr>
<td>Shock</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
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<tr>
<td>Squamous cell carcinoma</td>
<td>1</td>
<td>√</td>
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<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Thyroid cancer</td>
<td>1</td>
<td>√</td>
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<td>√</td>
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<tr>
<td>Tracheoesophageal fistula</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Trauma, Abdominal</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
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<tr>
<td>Trauma, Cranial</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
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<tr>
<td>Trauma, Thoracic</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Ulcerative colitis</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Urinary incontinence</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Urinary retention</td>
<td>1</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Varicose veins</td>
<td>1</td>
<td>√</td>
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COURSE REQUIREMENTS

Student Surgical Presentations

Note: students are required to forward presentations to moderators by the Thursday before their scheduled dates.

Description: The didactic portion of the surgical clerkship will be student presentations. Medical students on the Surgery Clerkship will be required to present topics contained in the Surgery Curriculum Outline. The topics may be chosen by the students based on their interests or as part of their clinical experience with a patient. The presentations will be done in a PowerPoint format. The presentations will be given to the attendings or surgical residents at each site, as well as, the surgery students on that block. Each student will do a maximum of six presentations through the block. There will be time allotted into the schedule for students to research and make their presentations. An outline of each presentation will be provided to each member of the group as these presentations will serve as a teaching resource for the clerkship students.

Goals: To give students an active role in learning the surgical objectives, refine their presentation of patients, and to assist in shelf preparation. The desired effect of this change is so that students who are researching topics in order to teach their classmates will have a better understanding of the subject. An attending or senior resident will be present for all presentations, so students will be able to practice presenting and get feedback. Also, it is a time for students to demonstrate their knowledge on a subject they have researched.

Presentations:

Students will prepare a 20 minute CASE BASED PowerPoint presentation. Other formats may be used.

The slides will be reviewed by an attending or senior resident so they can review the content before the student presents. Students must review their presentations prior to their assigned Tuesday with an attending or senior resident. This should be done the week before – no later than the Thursday before their assigned time. Students submitting their talks less than 72 hrs. prior to their assigned presentation may not be allowed to present and may be down-graded at the discretion of the attending in charge of that session.

- Students will pick their topics from a list of surgical objectives found in the curriculum and then will be responsible for covering the symptoms, diagnosis, treatments, and complications associated with that topic. The student will pick a topic within each Category and should avoid picking the same topic.

- If students do not pick a topic within the first 2 weeks of the clerkship a topic will be assigned to them by the clerkship director.

- Each presentation should begin with a CLINICAL CASE. This is designed to highlight what might be seen in a patient with the diagnosis being covered.
Remember the presentation is only 20 minutes so these must be concise and highlight the most high yield points.

- Presentations should be organized in the following manner:
  - Brief history and physical examination
  - Pertinent laboratory and radiologic data
  - Differential diagnosis
  - Plan
  - Discussion of the disease entity being presented

- The presentations should be clear with pictures and interactive for the students learning; ability to answer questions, getting students to suggest a differential diagnosis, associations with other conditions, etc.

- If there are signs and symptoms that can be demonstrated with videos, students are encouraged to use YouTube or other sources to enhance understanding/learning.

- At the end of the presentation there should be 4 or 5 multiple choice questions to review the topics covered.

- In order to avoid repetition and cover as many topics as possible, students will be asked to pick topics not previously presented.

- Sources: Students will have access to the online lectures from previous years and online surgical textbooks.

**Evaluation:** The presentations will be part of the final grade for the surgical rotation. The student presentation will be evaluated on the following:

- Clearly states the objectives of the talk and is based on evidence
- Speaks clearly and is able to engage the audience and includes questions for the audience
- Uses visual aids such as PowerPoint or videos effectively
- Meets the stated objectives
- The talk has been reviewed by a senior resident or attending in a timely manner before the presentation

*PLEASE NOTE THAT 20% OF THE GRADE IS BASED ON THE TALK BEING REVIEWED BY AN ATTENDING OR SENIOR RESIDENT IN A TIMELY MANNER BEFORE THE TALK IS GIVEN.*

Each category is scored as a 0 or 1. The maximum the student can receive for a presentation is a 5. This will be a portion of the site grade for the block.

Students will also be anonymously evaluated by each other, but this will not be part of the grade for the block. The purpose of the student evaluation is feedback, which will help the students improve teaching and presenting skills.
Topics in categories in sub-specialties such as Anesthesia, ENT, Orthopedics, Ophthalmology, Urology, CT Surgery, and Plastic and Pediatric surgery should be reviewed by an attending or senior resident in that specialty.

Ideally the attending reviewing the presentation should be the one be responsible for that Tuesday session. If sub specialists are available on the day their particular category is being presented they should be invited.

**Category: Vascular Arterial**
1. carotid disease
2. abdominal aortic aneurysms
3. visceral artery aneurysms
4. peripheral artery aneurysms
5. lower extremity arterial occlusive disease
6. arterial non-invasive testing - the vascular lab
7. arterial invasive imaging
8. mesenteric arterial insufficiency
9. compartment syndrome
10. thoracic aneurysms
11. arterial embolization to the extremities
12. cardiac evaluation of the vascular patient
13. upper extremity arterial occlusive disease

**Category: Vascular Venous**
1. acute Deep Venous Thrombosis of the lower extremity
2. chronic venous insufficiency of the lower extremity
3. Mesenteric venous insufficiency
4. non-invasive imaging for venous disease – the vascular lab
5. pulmonary emboli
6. anticoagulation prophylaxis for venous disease
7. anticoagulation – treatment of acute DVT

**Category: Vascular Dialysis access**
1. hemodialysis access
2. kidney transplantation

**Category: Vascular thoracic outlet syndrome**
1. management of thoracic outlet syndrome

**Category: Trauma**
1. blunt abdominal trauma
2. penetrating abdominal trauma
3. blunt chest trauma
4. penetrating chest trauma
5. orthopedic trauma
6. traumatic brain injury
7. spinal cord injury
8. management of hemorrhagic shock

**Category: Breast**
1. benign Breast Disease
2. malignant breast disease
**Category: Thyroid Disease**
1. benign thyroid disease
2. malignant thyroid disease
3. MEA I and II

**Category: Parathyroid Disease**
1. benign parathyroid disease
2. malignant parathyroid disease

**Category: Pulmonary Disease**
1. management of lung nodules
2. management of malignancies of the lung

**Categories: Liver**
1. benign liver disease (including abscesses)
2. malignant liver disease
3. liver transplantation

**Category: Stomach**
1. benign stomach conditions
2. malignant stomach conditions
3. management of upper GI bleeding
4. Bariatric surgery
5. GIST tumors

**Category: Esophagus**
1. benign esophageal disease
2. malignant esophageal disease

**Category: Pancreas**
1. pseudocysts
2. pancreatic malignancy
3. acute pancreatitis
4. chronic pancreatitis

**Category: Small Bowel**
1. benign small bowel conditions
2. malignant small bowel conditions
3. small bowel obstruction

**Category: Large Intestine**
1. benign large bowel conditions
2. large bowel malignancies
3. diseases of the anus
4. management of lower GI bleeding

**Category: Appendix**
1. appendicitis
2. malignancies of the appendix

**Category: Adrenal**
1. benign adrenal masses
2. malignant adrenal masses
3. pheochromocytoma

**Category: Biliary**
1. benign gall bladder conditions
2. malignant gall bladder conditions
3. Bile duct stones
4. bile duct malignancies

**Category: Urology**
1. renal malignancies
2. renal stones
3. bladder cancer
4. benign disease of the prostate
5. malignant disease of the prostate
6. testicular cancer

**Category: Hernia**
1. abdominal wall hernias
2. inguinal hernia
3. femoral hernia

**Category: Pediatrics**
1. common pediatric surgical emergencies

**Category: ENT**
1. common ENT emergencies

**Category: Ophthalmology**
1. common ophthalmologic emergencies

**Category: Dermatology**
1. common skin malignancies
2. melanoma

**Category: Portal Hypertension**
1. surgical management of portal hypertension

**Category: Surgical Critical Care**
1. surgical nutrition
2. monitoring of the critically ill patient
3. management of the burn patient
4. management of respiratory failure in the Surgical ICU

**Category: Neurosurgery**
1. benign neurosurgical conditions
2. malignant neurosurgical conditions

**Category: Orthopedics**
1. tumors of the bone

**Category: Soft Tissue Abnormalities**
1. benign soft tissue tumors
2. malignant soft tissue tumors

**Category: Plastic Surgery**
1. principles of plastic surgery
2. wound healing

**Category: CT Surgery**
1. Topics in Cardiac surgery
Category: Anesthesia
2. common anesthesia emergencies
3. airway management
4. common principles of anesthesia
5. monitoring of the anesthetized patient
SURGERY “PASSPORT”

Each student is responsible for submitting a Surgery “passport” prior to the end of the clerkship. Students should ask each observer for their e-mail address for the clerkship companion he/she observed you at the procedure. Per university mandate, any student who fails to submit his/her passport on time is subject to a grade of “Marginally Unsatisfactory” for the clerkship.

H&P REQUIREMENT

The Department of Surgery would like to ensure that you receive constructive feedback on your history-taking and physical examination skills during the clerkship. You are required to submit two complete H&P’s (hand-written or typed) to two attendings for critique. Your notes will be returned to you along with feedback. The first H&P is due within the first three weeks of the clerkship and the second H&P is due by the end of the second three weeks of the clerkship.

CLINICAL EXPERIENCE REQUIREMENTS

Students are required to review the Surgery Clerkship Clinical Experience Requirements (curriculum). This list includes the various diagnoses/problems that students are expected to experience during the clerkship.

CLERKSHIP COMPANION ENTRIES

The Department of Surgery wants to assure that you are seeing an appropriate number and mix of patients. Please log every patient with whom you have had direct interaction as soon as possible after the encounter. Indicate whether the encounter was inpatient or outpatient, and record your role in the workup (performed, assisted or observed). When you see a patient more than once, increment the progress notes counter. Remember not to record any individually identifiable patient information, such as patient name, patient initials or medical record number.

Please be sure to familiarize yourself with the problem and procedure lists that are attached. For each patient that you log, be sure to include a complete problem list (not just the primary problem). In addition, record all procedures on that patient with which you were involved, and indicate your role in each procedure (performed, assisted, observed). Students should enter all patient encounters using the Clerkship Companion website at regular intervals and are required to enter entries by the mid-point of the clerkship. A minimum of 100 entries (including inpatient and outpatient) is due by the end of the clerkship. Per university mandate, failure to complete entries within one week of completion of clerkship may result in a grade of “Marginally Unsatisfactory” for the clerkship.

This is also where you will log in Passport entries and Participation/Observation of cases in the 10th week of the surgical clerkship.

WebOSCE

Surgery students will be assigned “breaking bad news” using webcams on their own laptops. Each student will be assigned a 45 minute time slot with a standardized patient during an evening, usually between 6:00 p.m. -9:00 p.m. Failure to pass the WebOSCE will result in students needing to retake the assessment. There will be ramifications, including unprofessional citations, for students who do not comply with the assigned date/time without prior approval. Further information will be sent to students via e-mail.

BUSINESS OF HEALTHCARE

Although it is not factored into the Surgery Clerkship grade, students are required to complete the online Business of Healthcare assessment during the Surgery Clerkship. The deadline is 11:59 p.m. on the last day of the clerkship. A link to the module may be found on the Surgery Clerkship website.
Evaluation and Grading

END-OF-CLERKSHIP
EXAMS

Oral exams: The oral exam is standardized at all sites. You are asked to bring with you a list of eight cases (e.g., lower GI bleed, a gunshot wound to the abdomen, gangrene of the toe). The examiner will then use the case to ask you questions on the workup and management of this type of patient. It is suggested that if you list a topic as one of your eight cases that you know the workup and management of the problem. The second exam will be based on a different case.

SHELF exams: Students are required to obtain the minimum passing grade on the SHELF exam in order to complete the clerkship successfully. SHELF exams are administered on the Friday of the last week of the block. Students will receive information from the Division of Medical Education and/or the Dean’s Office at AGH as to the exact time, date and location of the SHELF exam.

GRADING POLICY

Grades are based on the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Evaluations</td>
<td>50%</td>
</tr>
<tr>
<td>SHELF Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Oral Exams</td>
<td>15%*</td>
</tr>
<tr>
<td>Student Presentations</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Students with oral examinations <3.0 will be offered another opportunity to retake the oral examinations (using the same case format) before the grading is completed for the clerkship.

Your final grade will be posted on line, using the standardized medical school evaluation form.

Note: students who have to repeat the clerkship due to 2 SHELF failures must do their remediation in the Philadelphia Area.
Suggested Reading/Other Resources

1. **NBME PRACTICE EXAMS**

   Student should utilize the on-line NBME Self-Assessment Clinical Science Subject Exams in Surgery. These will provide you with a performance and score interpretation report so that you can assess your strengths and weaknesses and review the text of questions answered incorrectly. They will also provide you with a score conversion guide to translate the score with the approximate score it predicts on the clinical science assessment.

2. **STUDENTS ARE REQUIRED TO UTILIZE ONE OF THE FOLLOWING TEXTBOOKS (indicated with an *). No purchase is necessary if available online via library.**

   **Suggested Textbook:**


   Available: e-book; Hahnemann and QL Reserve print collection; multiple copies of 17th & 18th print editions available for loan

   **Alternate Textbooks:**


   Available: e-book; Hahnemann Reserve print collection; multiple copies of 3rd and 4th print editions for loan


   Available: Hahnemann reserve print collection; multiple copies of 4th print edition for loan


   Available: e-book; Hahnemann Reserve print collection; Hahnemann Book print collection for loan; Queen Lane Book print collection for loan; Queen Lane Reserve collection – CD ROM (1); multiple copies of 8th print edition
for loan

(Schwartz's Principles of Surgery: Self-assessment and Board Review, 8th edition is available at Queen Lane Reserve collection)


Available: e-book; Hahnemann Reserve print collection; Queen Lane Book print collection (for loan); multiple copies of 11th and 12th print editions for loan

**Additional Recommended Reference:**

Silen, William (2010), 22nd Edition: Cope’s Early Diagnosis of the Acute Abdomen, Oxford University Press

Available: Hahnemann Book print collection; Queen Lane Reserve print collection; multiple copies of 20th and 21st print editions for loan

3. **REVIEW BOOKS**

**Top 3 Resources as reported by students in a previous block:**
NMS Surgery/Casebook
UWorld
Kaplan/Pestana Notes/Videos/Audio

**Study Guides**


https://innoserv.library.drexel.edu/record=b1890281~S9

Note: The copy at Hahnemann is in the regular collection and can be borrowed by individual users for 28 days +2 renewals: you can place it on Reserve so that it is for library use only and cannot be checked out – let me know and I can provide you with instructions for placing a book on reserve.

Blueprints surgery / Seth J. Karp, James P.G. Morris: questions and answers provided by Stanley Zaslau.

https://innoserv.library.drexel.edu/record=b1841745~S9
Note: The copies at Hahnemann and Queen Lane are in the regular collection and can be borrowed by individual users for 28 days + 2 renewals: I can provide you with instructions for placing these books on reserve.

Surgical recall / senior editor, Lorne H. Blackbourne
https://innoserv.library.drexel.edu/record=b2029652~S9

Surgery: PreTest self-assessment and review
https://innoserv.library.drexel.edu/record=b1363908~S9

Electronic

Case files / [edited by] Eugene C. Toy
https://innoserv.library.drexel.edu/record=b2419342~S9

The Library also provides access to Exam master, and online resource that includes sample medical questions for the USMLE and Medical Specialty board exams
https://drexel.myexammaster.com/new_exam